AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Currently amended) A method for identifying candidate compounds for regulating skeletal muscle mass or function, comprising:
   a. contacting a test compound with a vertebrate CRF_2R;
   b. determining whether the test compound binds to or activates the CRF_2 R;
   c. selecting those compounds that bind or activate CRF_2R, and further determining whether the test compound ~~increases~~ regulates muscle mass or function in a skeletal muscle atrophy model system; and
   d. identifying those test compounds that ~~modulate~~ regulate muscle mass or function as candidate compounds for regulating skeletal muscle mass or function.

2. (Original) The method for identifying candidate compounds according to Claim 1, in which the CRF_2R is expressed on a eukaryotic cell.

3. (Currently amended) The method for identifying candidate compounds according to Claim 1 wherein the CRF_2R has the amino acid sequence corresponding to the amino acid sequence of ~~SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, SEQ ID NO: 18, SEQ ID NO: 20, SEQ ID NO: 24, SEQ ID NO: 26,~~ SEQ ID NO: 32 ~~or SEQ ID NO: 38~~.

4. (Original) The method for identifying candidate compounds according to Claim 2, in which determining whether the test compound activates the CRF_2R involves measuring the cellular cAMP level.

5. (Original) The method for identifying candidate compounds according to Claim 4, in which the cell further comprises a reporter gene operatively associated

with a cAMP responsive element and measuring the cellular cAMP level involves measuring expression of the reporter gene.

6. (Original) The method for identifying candidate compounds according to Claim 5, in which the reporter gene is alkaline phosphatase, chloramphenicol acetyltransferase, luciferase, glucuronide synthetase, growth hormone, placental alkaline phosphatase, or Green Fluorescent Protein.

7. (Currently amended) A method for identifying candidate compounds for regulating skeletal muscle mass or function comprising:
   a. contacting a test compound with a cell expressing a functional vertebrate CRF_2R, and determining level of activation of CRF_2R resulting from the test compound;
   b. contacting said test compound with a cell expressing a functional vertebrate CRF_1R, and determining level of activation of CRF_1R resulting from the test compound;
   c. comparing the level of CRF_2R activation and the level of CRF_1R activation;
   d. selecting those test compounds that selectively activate CRF_2R and further determining whether said test compound ~~increases~~ regulates muscle mass or function in a skeletal muscle atrophy model system; and
   e. identifying those test compounds that ~~modulate~~ regulate muscle mass or function as candidate compounds for regulating skeletal muscle mass or function.

8. (Original) The method according to claim 7 wherein the candidate compound exhibits a 100-fold or greater selectivity for CRF_2R.

9. (Original) The method according to claim 7 wherein the candidate compound exhibits a 1000-fold or greater selectivity for CRF_2R.

10. (Original) The method according to claim 7 wherein the candidate compound exhibits between 1-fold and 100-fold selectivity for CRF_2R.

Claims 11-18 (Canceled)